

- 10 -

### CLAIMS

- 1 – A process for manufacturing a polymer foam which comprises an exothermal foaming step carried out in the presence of a means for preventing heat accumulation.
- 5        2 – The process according to claim 1, wherein the means for preventing heat accumulation is a compound having an atmospheric boiling point of at least 80°C.
- 3 – The process according to claim 2, wherein the means for preventing heat accumulation is present in an amount of 0.5 to 10% by weight relative to the  
10 total amount of material present in the foaming step.
- 4 – The process according to claim 1, wherein the means for preventing heat accumulation is a compound capable of endothermic decomposition at a temperature of at least 80°C.
- 5 – The process according to claim 4, wherein the means for preventing  
15 heat accumulation is present in an amount of 0.1 to 5% by weight relative to the total amount of material present in the foaming step.
- 6 – The process according to anyone of claims 1 to 5, which is carried out in the presence of a physical blowing agent.
- 7 – The process according to claim 6, wherein the physical blowing agent  
20 comprises a hydrofluorocarbon.
- 8 – The process according to claim 7, wherein the hydrofluorocarbon blowing agent comprises 1,1,1,3,3-pentafluorobutane (HFC-365mfc) and/or 1,1,1,3,3-pentafluoropropane (HFC-245fa).
- 9 – The process according to anyone of claims 6 to 8, wherein the physical  
25 blowing agent comprises a hydrocarbon.
- 10 – The process according to claim 9, wherein the hydrocarbon blowing agent comprises n-pentane, isopentane or cyclopentane.

- 11 -

11 – The process according to anyone of claims 6 to 10, wherein the physical blowing agent has an atmospheric boiling point of from -30°C to less than 80°C, preferably from 0°C to 50°C.

5 12 – The process according to anyone of claims 1 to 11, in which, in the foaming step, at least one isocyanate is reacted with at least one polyol in the presence of at least one catalyst to manufacture a polyurethane or a modified polyurethane foam.

10 13 – The process according to anyone of claims 1 to 11, in which, in the foaming step, at least one diphenol is reacted with at least one aldehyde in the presence of at least one catalyst to manufacture a phenolic foam.

14 – The process according to anyone of claims 1 to 13, wherein the foam has a thickness of at least 1 cm.

15 15 – The process according to anyone of claims 1 to 13, wherein the foam is a block-foam.

16 – A polymer foam which is obtainable by the process according to anyone of claims 1 to 15.

17 – A composition which comprises a physical blowing agent and a means for preventing heat accumulation.

20 18 – The composition according to claim 17, which is a foamable mixture for producing a polymer foam.

19 – Use of a hydrofluorocarbon blowing agent in accordance with claims 7 or 8, for manufacturing a block foam.